

# Effectiveness of Participative Community Singing Intervention Program on Promoting Resilience and Mental Health of Aboriginal and Torres Strait Islander People in Australia

Jing Sun<sup>1,3</sup> and Nicholas Buys<sup>2,3</sup>

<sup>1</sup>Griffith Health Institute and School of Public Health, Griffith University, Australia

<sup>2</sup>Griffith Health Institute and Health Group, Griffith University, Australia

<sup>3</sup>Peking University, Beijing, China

## 1. Introduction

Aboriginal and Torres Strait Islander people are more likely to have a higher prevalence of mental illness than non-Indigenous people, which may be caused by multiple factors (Australian Bureau of Statistics, 2008; Australian Institute of Health and Welfare, 2008; Pink & Allbon, 2008). These factors have been shown to be closely related to resilience. The concept was introduced by Masten and Coatsworth (1998) and includes key factors that affect recovery from illness and maintenance of health. The key factors of resilience entail (1) an ability of bouncing back, through which a person can recover from stressful event quickly; (2) a sense of family support, through which a person can manage a stressful event process; and (3) a sense of social connectedness, through which a person feels supported and connected to the community and social environment in a stressful event (Masten & Coatsworth, 1998; Weinberger, Schwartz & Davidson, 1979; Werner & Smith, 2001). Previous studies have shown an association with the sense of resilience score and depression. A high resilience score is related to a lower degree of depression (Weinberger et al., 1979), a lower level of anxiety (Weinberger et al., 1979), and a lower mental or physical stress response (Werner & Smith, 2001). These studies suggest the importance of resilience for coping with stress and adverse events and to prevent mental illness. A community participative singing approach (CPSA) is an effective intervention in promoting resilience and mental health in a range of population groups (Cohen et al., 2006, 2007). The CPSA programme is modelled on the work of Clift and colleagues at the Canterbury Christ Church University in England (Clift & Hancox, July 2008; Clift et al., 2007).

The programme is based on the principle of multi-psychosocial functions development, 'divided into environmental and social processes (interpersonal mechanisms) and cognitive and emotional processes (intrapersonal mechanisms). These processes are bi-directional, as the interpersonal mechanisms can trigger intrapersonal responses, and vice versa' (Lob et

al., 2011, p. 46). The goal of the CPSA programme is to guide participants through breathing exercises, group singing, and social interaction and collaboration. It aims to maximise their collective experience in a non-judgemental and accepting way, one where individuals feel a sense of belonging and safety, and to build relationships in which individuals socialise with others and are able to work on their social skills in a safe setting. A second aim is to develop individuals' inner psychological state such as competence, purposefulness, managing emotions and wellbeing, and creating a meaningful life. It is effective for mood disturbance and stress symptoms (Lob et al., 2011), for quality of life (Cohen et al., 2006, 2007) and the immune profile (Clift et al., 2008). However, few studies have examined interventions for mental health promotion in the Aboriginal and Torres Strait Islander population. Thus, the present study was performed to investigate the efficacy of community participative singing on the sense of resilience and psychological wellbeing of Aboriginal and Torres Strait Islander people. The study was performed for Aboriginal and Torres Strait Islanders who reside in five Aboriginal and Torres Strait Islander communities in South East Queensland, Australia. These Aboriginal and Torres Strait Islander people may be under particular stress and have a mental illness status since many of them have gone through the colonisation process and had traumatic experiences related to it. The aim of the study was to assess the effectiveness for Aboriginal and Torres Strait Islander people of active engagement in community music activities on measures of resilience, mental health, and quality of life.

It is hypothesised that Aboriginal and Torres Strait Islander people will have increased resilience, mental health and quality of life after they participate in a community singing intervention programme for six months.

## 2. Methods

The study used the participatory community singing approach and the prospective intervention method for the intervention trial. A multi-method design was used to monitor and evaluate the programme. Participants were invited to participate in the project in June 2010 and completed questionnaires towards the end July 2010, and they were asked to fill in the questionnaire again in January and February 2011. They were also asked over the course of the project to provide qualitative comments on their experiences. The present paper only focuses on changes over a six-month period from July 2010 to the January 2012 based on the quantitative results. The study was granted ethical approval by Research Ethics Committee at Griffith University with GU Ref No: PBH/13/10/HREC

### 2.1 Participants and data collection procedure

Participants were adults aged 18 and above. They were all able to speak English, provide informed consent and complete questionnaires. Individuals who were unable to provide informed consent or complete questionnaires were excluded from the study.

Researchers, in conjunction with five Community Controlled Health Services (CCHSs) providing the intervention, sought suitable venues across five South East Queensland communities to conduct intervention activities. Advertisements seeking participants were placed in each CCHS and in local newspapers, and leaflets were delivered to homes within

the vicinity of the venues. Two 'taster sessions' were held in each venue, which included the provision of information, an invitation for questions and an opportunity for individuals to sample the nature of the proposed intervention programme. A dedicated phone line and email address was set up to deal with responses and queries and a checklist was devised to collate details of those volunteering to participate.

## 2.2 Participatory community singing intervention approach

The chief investigator met with Queensland Aboriginal and Islander Health Council (QAIHC) representatives to discuss the initial concept. QAIHC representatives met with and discussed the concept with each Chief Executive Officer (CEO) from each Aboriginal and Islander CCHS. A reference committee was established made up of CEOs, health workers, counsellors and music therapists, the majority of which identified as Aboriginal and/or Torres Strait Islander. QAIHC took on an active role in meeting with community elders via each local council.

Each singing group was led by a skilled and experienced singing group leader. Leaders were provided with five days of training and met regularly throughout the project to ensure a broadly consistent approach. The singing programme took place in the five groups over two three-month blocks. Groups came together at the end of each block for a choral performance event. Each session lasted 120 minutes, with a break for socialising. Sessions commenced with 30 minutes of relaxation, posture, breathing and vocal exercises followed by singing. Two performances for five communities were organised after three months and again after six months of intervention. Monthly performances for each community were held after six months.

## 2.3 Measures

A number of reliable and valid questionnaires was used to assess the effectiveness of the participative community singing programme on improving resilience and quality of life, and reducing depression symptoms of the participants.

**Resilience:** The Brief Resilience Scale is a five-item scale used to assess resilience and individual strength, defined as the ability to bounce back and recover from stress (Smith et al., 2008).

**Depression:** The Indigenous Risk Impact Screen (IRIS) scale is a six-item scale used to assess depressive symptoms and it is designed for use with the Aboriginal and Torres Strait population (Schlesinger et al., 2007). Scores range from six to 18, with higher scores reflecting greater levels of depressive symptoms, and a score of 11 is the cut-off point (Schlesinger et al., 2007). Sensitivity and specificity of the measure was checked by using a depression total score against clinical diagnosed depression results.

**Singing questionnaire:** The singing questionnaire, consisting of eight questions, was modified based on Clift and colleagues (2010) to measure the improvement of quality of life through community participative singing activities. These questions were designed to measure participants' feelings about their emotional, physical health, spiritual, and social aspects of health. An example question is 'Singing has spiritual significance for me personally'. For each question, participants were asked to choose one of the answers from

the three options 'never', 'sometimes' or 'all the time'. The more participants that choose the answer 'all the time', the more likely it is that the participative singing programme has impacted on the quality of life of participants.

### 3. Results

Table 1 shows that there are statistically significant differences between the pre- and post-intervention phases through a decreased depression rate, improved quality of life, and a reduction of depression symptoms, reduced medication use in participants after six months of intervention activities. This indicates that the participative community singing is effective in improving Aboriginal and Torres Strait Islander participants' resilience, quality of life and mental health.

Variables	Pre (%) N=217	Post (%) N=50	difference	$\chi^2$	p
Resilience1: It takes me a long time to get through stressful events (all the time)	52(24.2%)	5(9.6%)	14.6%	6.47	0.04
Resilience2: I tend to take a long time to get over difficult things in my life (all the time)	55 (25.7%)	5(9.6%)	14.1%	7.60	0.02
Depression (yes)	80(37.2%)	14 (28.2%)	9% decrease	6.61	0.03
Singing is something I like to do	58(26.5%)	42(80.8%)	Significant increase		
Singing has spiritual significance to me personally	50(22.9%)	42(80.8%)	Significant increase	75.92	0.001
Singing really helps to improve my general wellbeing	61(27.9%)	41(78.8%)	Significant increase	63.38	0.001
I find singing helps me to relax and deal with the stresses of the week	55(25.1%)	41(78.8%)	Significant increase	69.11	0.001
Singing helps to give me a positive attitude to life	61(27.9%)	44(84.6%)	Significant increase	69.30	0.001
Being in a singing group and singing is a very important part of my life	51(23.3%)	43(82.7%)	Significant increase	73.13	0.001
Singing helps to make me a happier person	61(27.9%)	44(84.6%)	Significant increase	67.93	0.001
Singing is an activity that has made me physically healthier	45(20.5%)	35(67.3%)	Significant increase	73.19	0.001

Table 1. Improved mental health, resilience and quality of life post-intervention time.

Medication use for Chronic disease	Pre	Post	Differences	$\chi^2$	p
Medication use (yes)	44.2%	31.9%	12.3% decrease	6.35	<0.01
Medication reduced the last 6 month	18.3%	27.3%	9% medication reduction	7.91	<0.01

Table 2. Difference in medication use between the pre- and post-intervention phases

## **4. Discussion**

### **4.1 Changes in resilience**

Our findings show a statistically significant improvement in the percentage of participants who are able to recover from stress and difficult events in post-intervention phase. It should be remembered that the sample in the study is people with Aboriginal and Torres Strait Islander background. It includes not only people with current mental health and chronic diseases issues, but also individuals with a history of colonisation, 49% of whom gave depression scores below the clinical cut-off point. The significant change in the resilience scores indicate that the community singing programme helps to build participants' resilience. This result confirmed the findings of a previous study that choir singing enhanced confidence and self-esteem, gave a sense of purpose and of achievement (Tonneijck et al., 2008). In the present study, the community singing programme has resulted in improved sense of ability to recover and bounce back from the stressful and difficult events in life.

### **4.2 Change in singing-related quality of life**

Statistically significant changes are also found for aspects within the singing-related quality of life questionnaire regarding physical health, social and emotional health, stress reduction, spiritual significance, suggesting that group singing helps to create improvements in all these areas equally. The findings of our study are consistent with those of other studies that singing carries benefits to physical, mental and social health. Clift et al. (2010) and Clift et al. (2008) examined the effects of choral singing on wellbeing in participants with relatively low psychological wellbeing, as assessed by the World Health Organization Quality of Life (WHOQOL)-BREF, and high scores on the singing scale, indicating a strong perceived impact of singing on a sense of personal wellbeing. In Clift et al.'s (2010) study, it was found that singing provided support in coping with challenges in four aspects: enduring mental health problems, family and relationship problems, physical health challenges and recent bereavement.

### **4.3 Change in depression**

Our results show a statistically significant reduction in the percentage of participants who had depression in the post-intervention phase. It should be noted that the sample includes not only people with current mental health issues, 37.8% of whom gave depression scores below the clinical cut-off point. There was 9% reduction in the percentage of people who had depression, suggesting that the singing programme helps some people with mental illness to recover from the depression status. This is consistent with a recent study by Clift and Morrison (2011), who also found that singing programmes significantly reduce the depression rate among participants with depression.

The findings of our study indicate that a participative community singing programme is effective in preventing the deterioration of depression, and in improving resilience and quality of life. A CPSA can foster a sense of happiness, positive attitude towards life, and feelings of the significance of life. Singing is considered by participants a means to release

stress, and deal with worries and negative emotions. Singing is also regarded as a way to make them physically healthy as indicated in the reduced level of medication use.

A community-based participatory research approach can foster a sense of self-determination, create greater commitment and can ultimately improve self-esteem and increase a sense of belonging.

## 5. Limitations

There are a number of limitations for the study. The first limitation is lack of control group as a comparison to intervention group in the post intervention phase. The difference between pre intervention and post intervention in resilience, quality of life and depression would not be attributable to the singing activities. The second limitation is that the standard measure of depression, for example, Beck's Depression Scale, and WHO Quality of Life Questionnaire were not used, and this may have limited the generalisation of the study results to other populations. Further study is needed to ensure the control group data are collected to strengthen the methodology and evidence of the present study. In addition, standard measures are needed in the next step of the study so that the results can be compared with previous published literature, and be generalised to wide population groups.

## 6. Conclusion

The results of the study found that the community singing programme is effective in promoting social and emotional wellbeing, and preventing the deterioration of depression and chronic conditions. The results of the study may inform future studies of preventative and treatment interventions for high-risk populations that integrate community singing into prevention and intervention strategies in the Aboriginal and Torres Strait Islander population in Australia.

## 7. Acknowledgement

The authors received financial support from Griffith Health Institute and Provost Chancellor Office at Logan Campus at Griffith University, and Queensland Aboriginal and Islander Health Council. The authors also wish to acknowledge the support of the following Aboriginal Community Controlled Health Services: *Brisbane Kambu Medical Service Centre Pty Ltd, Kalwun Health Service, Aboriginal and Torres Strait Islander Community Health Service Brisbane Ltd, Goolburri Health Advancement Corporation, and Warwick Peace Festival Community.* The authors also wish to thank all participants' participation from five Aboriginal and Torres Strait Islander communities. In addition, authors wish to express great thanks to Lindsay Johnson, Dion Tatow, Lennart Dahlen in Queensland Aboriginal and Islander Health Council for their contribution in data collection and intervention coordination work.

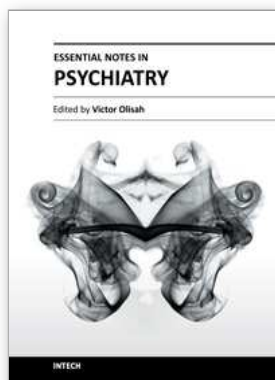
## 8. References

- Australian Bureau of Statistics. (2008). The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples, ABS, Canberra.
- Australian Institute of Health and Welfare. (2008). Australia's Health, Canberra.

- Clift, S. & Hancox, G. (July 2008, in press). The significance of choral singing for sustaining psychological wellbeing: Findings from a survey of choristers in England, Germany and Australia. Paper presented at the ISME Commission Seminar on Community Music, Rome.
- Clift, S., Hancox, G., Morrison, I., Hess, B., Kreutz, G. & Stewart, D. (2007, November). Choral singing and psychological wellbeing: Findings from English choirs in a cross-national survey using the WHOQoL-BREF. Paper presented at the Proceedings of the International Symposium on Performance Science, Porto.
- Clift, S., Hancox, G., Staricoff, R. & Whitmore, C. (2008). A systematic mapping and review of research on singing and health-non-clinical studies. Canterbury: Canterbury Christ Church University College.
- Clift, S., Hancox, G., Morrison, I., Hess, B., Kreutz, G., & Stewart, D. (2010). Choral singing and psychological wellbeing: Quantitative and qualitative findings from English choirs in a cross-national survey. *Journal of Applied Arts and Health* doi: 10.1386/jaah.1.1.19/1: 19-34.
- Clift S, Morrison I. (2011). Group singing fosters mental health and wellbeing: findings from the East Kent "singing for health" network project. *Mental Health and Social Inclusion*. 2011 Vol. 15(No.2):88-97.
- Cohen, G. D., Perlstein, S., Chapline, J., Kelly, J., Firth, K. M. & Simmens, S. (2006). The impact of professionally conducted cultural programs on the physical health, mental health, and social functioning of older adults, *The Gerontologist* Vol. 46(No. 6): 726-734.
- Cohen, G. D., Perlstein, S., Chapline, J., Kelly, J., Firth, K. M. & Simmens, S. (2007). The impact of professionally conducted culturally programs on the physical health, mental health and social functioning of older people-2 year results, *Journal of Aging, Humanities and the Arts* Vol. 1: 5-22.
- Lob, G. V., Camic, P. & Clift, S. (2011). The use of singing in a group as a response to adverse life events, *International Journal of Mental Health Promotion* Vol. 12(No. 3): 45-53.
- Masten, A. S. & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: lessons from research on successful children, *American Psychologist* Vol. 53: 205-220.
- Pink, B. & Allbon, P. (2008). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2008*, Australian Bureau of Statistics, and Australian Institute of Health and Welfare, Canberra.
- Schlesinger, C. M., Ober, C., McCarthy, M. M., Watson, J. D. & Seinen, A. (2007). The development and validation of the Indigenous Risk Impact Screen (IRIS): A 13-item screening instrument for alcohol and drug and mental health risk, *Drug and Alcohol Review* Vol. 26: 109-117.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P. & Bernard, J. (2008). The Brief Resilience Scale: Assessing the ability to bounce back, *International Journal of Behavioral Medicine* Vol. 15: 194-200.
- Tonneijck, H. I. M., Kinebanian, A. & Josephsson, S. (2008). An exploration of choir singing: Achieving wholeness through challenge, *Journal of Occupational Science* Vol. 15(No. 3): 173-180.

- Weinberger, D. A., Schwartz, G. E. & Davidson, R. J. (1979). Low-anxious, high-anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress, *Journal of Abnormal Psychology* Vol. 88: 369-380.
- Werner, E. E. & Smith, R. S. (2001). Journeys from childhood to midlife: Risk, resilience, and recovery. Introduction to the special issue on resilience, *Substance Use & Misuse* Vol. 39(No. 5): 657-670.





## **Essential Notes in Psychiatry**

Edited by Dr. Victor Olisah

ISBN 978-953-51-0574-9

Hard cover, 580 pages

**Publisher** InTech

**Published online** 27, April, 2012

**Published in print edition** April, 2012

Psychiatry is one of the major specialties of medicine, and is concerned with the study and treatment of mental disorders. In recent times the field is growing with the discovery of effective therapies and interventions that alleviate suffering in people with mental disorders. This book of psychiatry is concise and clearly written so that it is usable for doctors in training, students and clinicians dealing with psychiatric illness in everyday practice. The book is a primer for those beginning to learn about emotional disorders and psychosocial consequences of severe physical and psychological trauma; and violence. Emphasis is placed on effective therapies and interventions for selected conditions such as dementia and suicide among others and the consequences of stress in the workplace. The book also highlights important causes of mental disorders in children.

### **How to reference**

In order to correctly reference this scholarly work, feel free to copy and paste the following:

Jing Sun and Nicholas Buys (2012). Effectiveness of Participative Community Singing Intervention Program on Promoting Resilience and Mental Health of Aboriginal and Torres Strait Islander People in Australia, *Essential Notes in Psychiatry*, Dr. Victor Olisah (Ed.), ISBN: 978-953-51-0574-9, InTech, Available from: <http://www.intechopen.com/books/essential-notes-in-psychiatry/effectiveness-of-participative-community-singing-intervention-program-on-promoting-resilience-and-me>

# **INTeCH**

open science | open minds

### **InTech Europe**

University Campus STeP Ri  
Slavka Krautzeka 83/A  
51000 Rijeka, Croatia  
Phone: +385 (51) 770 447  
Fax: +385 (51) 686 166  
[www.intechopen.com](http://www.intechopen.com)

### **InTech China**

Unit 405, Office Block, Hotel Equatorial Shanghai  
No.65, Yan An Road (West), Shanghai, 200040, China  
中国上海市延安西路65号上海国际贵都大饭店办公楼405单元  
Phone: +86-21-62489820  
Fax: +86-21-62489821